



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------------|------------------|
| 10/602,636 | 06/25/2003 | Kyung-Shig Chung | 1293.1757 | 1070 |
| 21171 | 7590 | 06/06/2007 | | |
| STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005 | | | EXAMINER PHAM, THIERRY L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2625 | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 06/06/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/602,636

Applicant(s)

CHUNG ET AL.

Examiner

Thierry L. Pham

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- This action is responsive to the following communication: Nonprovisional application filed on 6/25/03.
- Claims 1-29 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsusaka et al (US 20020039508).

Regarding claim 1, Tsusaka discloses an image forming apparatus (fig. 1) comprising:

- a printing unit (fig. 1) which prints an image on paper;
- an exit member (rollers 31 & 32, fig. 1) to push the paper out of the image forming apparatus;
- an exit path (exit path 56, fig. 1) which connects an exit of the printing unit to an exit member which pushes the paper outside of the printing unit; and
- a plurality of guide members (guide members 61, fig. 1, par. 32) arranged widthwise (par. 32) of the paper, each guide member having a first guide side (fig. 1) to guide the paper coming out of the printing unit along the exit path, wherein each guide member is movable (movable guide member, fig. 1, par. 53) such that the first guide side rotates (rotates, par. 53) when the first guide side is contacted by the paper coming out of the printing unit, and returns to an original position (par. 35-37) after the paper completely passes through the printing unit.

Art Unit: 2625

Regarding claim 2, Tsusaka further discloses the apparatus of claim 1, further comprising a reverse path (reverse path, par. 35-37) which branches out of the exit path between the exit of the printing unit and the exit member, so that the direction of the movement of the paper, which moves backward (moves backward, abstract and par. 35-37) along the exit path, is reversed and again supplied into the printing unit when the exit member rotates in a reverse direction, wherein each guide member further comprises a second guide side which guides the paper, which goes backward along the exit path, along the reverse path.

Regarding claim 3, Tsusaka further discloses the apparatus of claim 2, further comprising a plurality of auxiliary guide members (ref. 34, fig. 1) between the guide members, each auxiliary guide member including a first side and a second side, the first side being more distant from the rear side of paper than the first guide side and the second side being lower than the second guide side.

Regarding claim 4, Tsusaka further discloses the apparatus of claim 1, wherein the guide members (par. 46) pivot independently from one another.

Regarding claim 5, Tsusaka further discloses the apparatus of claim 1, wherein the guide members pivot together (fig. 2).

Regarding claim 6, Tsusaka further discloses the apparatus of claim 1, further comprising first stoppers (guide member stoppers 63, fig. 1) formed in the same direction as the pivoting direction of the guide members and respectively contact the guide members to be a predetermined distance away from the guide members.

Regarding claim 7, Tsusaka further discloses the apparatus of claim 1, further comprising second stoppers (guide member stoppers 63, fig. 1) which control the extent of the pivoting action of the guide members so that the guide members do not pivot

beyond the original positions when the guide members return to the original positions thereof.

Regarding claim 8, Tsusaka further discloses the apparatus of claim 1, wherein the guide members return to the original positions thereof due to own weights thereof when the paper passes by the guide members.

Regarding claim 9, Tsusaka further discloses the apparatus of claim 1, further comprising elastic members (par. 28) which apply elastic force to the guide members to make the guide members return to the original positions thereof.

Regarding claim 10, Tsusaka further discloses the apparatus of claim 1, further comprising a plurality of auxiliary guide members (ref. 34, fig. 1) between the guide members, each auxiliary guide member including a first side more distant from the rear surface of paper than the first guide side.

Regarding claim 11, Tsusaka further discloses the apparatus of claim 2, further comprising: a first frame (frame 60, fig. 1) on which the plurality of guide members are movably connected; and a second frame positioned adjacent to a side of the first frame opposite to the plurality of guide members and forming a reverse path with the first frame.

Regarding claim 12, Tsusaka further discloses the apparatus of claim 11, further comprising: a feed roller (feed roller 7, fig. 1) positioned at the end of the reverse path to receive the paper from the reverse path and feed the paper toward the printing unit to print an image on the reverse side thereof.

Regarding claim 13, Tsusaka further discloses the apparatus of claim 2, wherein the plurality of guide members further comprise a second guide side to guide paper towards the reverse path (reverse path, par. 35-37).

Regarding claim 14, Tsusaka further discloses the apparatus of claim 1, wherein the first guide side has a shape (fig. 1 & 3) of a straight line.

Regarding claim 15, Tsusaka further discloses the apparatus of claim 1, wherein the first guide side has a shape of a slight curve (curve, fig. 3) to direct the paper toward the exit member.

Regarding claim 16, Tsusaka further discloses the apparatus of claim 13, wherein the second guide sides (ref. 70, fig. 2) of the respective guide members are slightly higher than an upper surface of the first frame.

Regarding claim 17, Tsusaka further discloses the apparatus of claim 11, further comprising plural pairs (joints, fig. 1 & 2) of combiners attached to the first frame, each pair of combiners movably connecting the respective guide member to the first frame.

Regarding claim 18, Tsusaka further discloses the apparatus of claim 17, wherein the plural guide members each comprise axes (fig. 1) formed at both surfaces thereof to engage with a respective combiner to movable attach the plural guide member to the first frame.

Regarding claim 19, Tsusaka further discloses the apparatus of claim 18, wherein there are five guide members (fig. 1) connected with the first frame.

Regarding claim 20, Tsusaka further discloses the apparatus of claim 13, wherein the second guide side or each guide member extends (extends, fig. 2) from an end of the first frame toward the reverse path.

Regarding claim 21, Tsusaka further discloses the apparatus of claim 20, further comprising recessed portions (ref. 64, fig. 2) aligned with respective guide members and

Art Unit: 2625

formed at end of the first frame such that movement of the second sides of the guide members are not restricted by the end of the first frame.

Regarding claim 22, Tsusaka further discloses the apparatus of claim 10, wherein the auxiliary guide members are formed as ribs of the first frame (fig. 2).

Regarding claim 23, Tsusaka further discloses the apparatus of claim 22, wherein each of the ribs comprises: a first rib side positioned more distant from the rear surface of the paper than the first guide side to guide the paper in the forward path; and a second rib side positioned lower than the second guide side to guide the paper in the reverse path (64A & 64B, fig. 2).

Regarding claim 24, Tsusaka further discloses the apparatus of claim 21, wherein the guide members are formed to pivot towards (fig. 2) the first frame.

Regarding claim 25, Tsusaka further discloses the apparatus of claim 24, wherein the guide members have a center of gravity off center (fig. 2).

Regarding claim 26, Tsusaka further discloses the apparatus of claim 1, further comprising tension coil springs (spring, par. 18) each connected to a respective guide member and the first frame to force the guide members to pivot slightly when contacted by the paper and then return to an original position.

Regarding claim 27, Tsusaka further discloses the apparatus of claim 20, further comprising first stoppers (fig. 2) formed at end of the first frame such that movement of the second sides of the guide members are not restricted by the end of the first frame.

Regarding claim 28, Tsusaka further discloses the apparatus of claim 21, further comprising second stoppers (fig. 2) to prevent the guide members from excessively moving beyond the original position when returning thereto.

Art Unit: 2625

Regarding claim 29 recites limitations that are similar and in the same scope of invention as to those in claim 1 above; therefore, claim 29 is rejected for the same rejection rationale/basis as described in claim 1.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L. Pham whose telephone number is (571) 272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thierry L. Pham


GABRIEL I. GARCIA
PRIMARY EXAMINER